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Prevention

TREATMENT RESISTANT HYPERTENSION IN A COMMUNITY-BASED PRACTICE NETWORK

Moderated Poster Contributions

Poster Sessions, Expo North

Sunday, March 10, 2013, 9:45 a.m.-10:30 a.m.

Session Title: Hypertension: Patterns, Profiles and Pills

Abstract Category: 25. Prevention: Hypertension

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Authors: Brent M. Egan, Yumin Zhao, Thomas Todoran, Ibrahim Shatat, David Calhoun, Medical University of South Carolina, Charleston, SC, USA, University of Alabama-Birmingham, Birmingham, AL, USA

Background: Treatment resistant hypertension (TRH) is defined by blood pressure (BP) uncontrolled on ≥ 3 or controlled on ≥ 4 BP medications including a diuretic at optimal doses. The prevalence of TRH is uncertain.

Methods: Electronic record data were analyzed from >200 OQUIN practices in the Southeast US. From 2007-2010, 468,877 hypertensives were included. Optimal BP medication dose was defined as $\geq 50\%$ of maximum recommended hypertension (HTN) dose. BP <140/<90 = control. Multivariable logistic regression was used to assess variables independently associated with 'optimal therapy' in uncontrolled TRH and control in all TRH.

Results: 147,635 patients (31.5%) had uncontrolled HTN with 30.3% uncontrolled on ≥ 3 prescribed BP meds (apparent (a)TRH); 28.7% of aTRH patients had Stage 2 HTN. In controlled TRH, 12.3% were prescribed ≥ 4 BP meds. In uncontrolled aTRH, 49.7% were prescribed 'optimal' therapy. Factors associated with optimal therapy in uncontrolled TRH included black race (Odds Ratio 1.40 [95% CI 1.32-1.49]), chronic kidney disease (1.31 [1.25-1.38]) diabetes (1.30 [1.24-1.37]), and CHD risk equivalent (1.29 [1.14-1.46]). In all TRH patients, factors linked with BP control were black race (0.66 [0.63-0.69]), cardiovascular disease (1.40 [1.35-1.45]), prescription of single-pill BP med combinations (1.31 [1.26-1.36]) and statins (1.28 [1.22-1.33]). $P < 0.001$ all odds ratios.

Conclusions: About 30% of uncontrolled HTN in OQUIN have aTRH with

only half prescribed 'optimal' therapy. Optimal therapy is more often prescribed when CVD risk is higher. Black TRH patients are more likely to have optimal therapy prescribed but less likely to attain BP control. After accounting for pseudo-resistance (reportedly 30%-50%) and suboptimal regimens (~50% current report), the uncontrolled TRH population remains large, disproportionately minority, at high CVD risk, and could benefit from effective strategies to improve BP control, which may include prescribing of single-pill antihypertensive medication combinations and statins.